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December 29, 2003

Mr. Dennis R. Downs
Executive Secretary
Utah Solid and Hazardous Waste Control Board
Utah Department of Environmental Quality
288 North 1460 West
PO Box 144880
Salt Lake City, Utah 84114 - 4880

Re: *Comments on Proposed Promontory Point Class I Landfill*

Dear Mr. Downs:

On behalf of Mineral Resources International, Inc. ("MRI"), please find the attached comments on the Proposed Promontory Point Class I Landfill (the "Proposed Landfill"). The Proposed Landfill has been noticed for public comment. By way of summary, MRI opposes issuance of a permit for the Proposed Landfill for the reasons set forth below. The comments attached hereto as Exhibit A provide additional information regarding the technical deficiencies of the Proposed Landfill. The comments were prepared by Mr. Robert Ramsey of Canyon Concepts, LLC. Mr. Ramsey is a Utah Licensed Professional Geologist and a Registered Engineering Geologist with extensive experience. See attached resume.

Summary of Technical Deficiencies with Promontory Point Landfill Application

The application does not sufficiently address the likelihood that debris will blow from the Proposed Landfill into the Great Salt Lake or mitigation measures to address this likelihood. A weather station located within one-quarter mile of the Proposed Landfill records wind speeds of over 30 miles per hour weekly, over 50 miles per hour several times a year, and has recorded high wind events of over 80 miles per hour this year. The winds come from all directions and, therefore, it is likely that wind would blow debris from the Proposed Landfill into the Great Salt Lake. Neither the application nor the plan of operations addresses specific mitigation measures for windblown debris during high wind conditions.

Mr. Robert Ramsey also identifies the following technical deficiencies in the permit application:

- The application fails to show that the site will be accessible in the fashion required by the Conditional Use Permit, i.e., by railroad causeway or the Great Salt Lake causeway.

- The application does not clearly indicate that the waste modules will be located at least 1000 feet from the most recent high water level and does not sufficiently address whether there is enough water at the site for operation of the facility.

- The application does not provide for a sufficient groundwater monitoring system and the groundwater-monitoring plan is deficient.

- The application does not respond to the potential wildlife impacts of the proposed landfill raised by the U.S. Fish and Wildlife Service.

- The application does not contain a sufficient Plan of Operations; it fails to: (i) adequately discuss the size of the tipping face or the placement of daily and intermediate cover material; (ii) adequately address the local geohydrology; (iii) address potential fire emergencies at the site; (iv) address alternative waste handling procedures and temporary equipment breakdown; and (v) sufficiently address employee training, or handling and disposal of special or industrial wastes.

- The application does not include a closure schedule, fails to adequately address final cover for the site after closure, and appears to underestimate the post-closure costs at the facility.

Legal Deficiencies with Promontory Point Landfill Application

The proposed landfill runs afoul of several of the "Solid Waste Facility Location Standards" promulgated pursuant to the Utah Solid and Hazardous Waste Act. The siting criteria state in relevant part:

> No new facility shall be located within: (i) **one thousand feet of a . . . recreation area**; (ii) **ecologically and scientifically significant natural areas** including wildlife management areas and habitat for threatened or endangered species . . . .
>
> No new facility . . . shall be located . . . in a location that **could cause contamination to a lake**, reservoir, or pond.

Utah Admin. Code R315-302-1(2)(a)(i)-(ii),(c)(i) (emphasis added).

In addition, "The owner or operator must demonstrate the integrity of the unit and its **ability to protect ecological resources** by addressing the following factors: ... **impacts on** fish, **wildlife**, and other aquatic resources **and their habitat** from release of the solid waste." Utah Admin. Code R351-302-1(2)(d)(iv)(D) (emphasis added).

From the maps submitted with the application, it appears that the Proposed Landfill may be located within **1000 feet of a recreation area**, namely the Great Salt Lake. The Great Salt Lake attracts thousands of outdoor recreation enthusiasts, kayakers, sailboaters, and birdwatchers each year.

Moreover, the **ecological and scientific significance** of the Great Salt Lake and the lands surrounding it cannot be overstated. There are eight state waterfowl management areas and one federal migratory bird refuge that lie adjacent to the Great Salt Lake. These areas serve as important resting, feeding, and nesting habitat for millions of birds. The Great Salt Lake and its environs is one of only fifteen reserves in the Western Hemisphere Shorebird Reserve Network.[1] The United States Court of Appeals for the Tenth Circuit has recently explained the significance of this designation in connection with its decision vacating and remanding the permits allowing construction of a proposed highway that would have impacted wildlife near the Great Salt Lake:

> The Great Salt Lake ("GSL") and the wetlands surrounding its shoreline serve as an important habitat for a variety of birds, reptiles, amphibians, and mammals, some of which are endangered. The wetlands of the GSL account for 75 percent of all wetlands in the State of Utah, whose total land area consist of only 1.5 percent wetlands. The shores of the GSL are internationally important because they are a link of the Western Hemisphere Shorebird Reserve Network ("WHSRN").

Utahns for Better Transportation v. U.S. Dept. of Transp., 305 F.3d 1152, 1161 (10th Cir. 2002).

As explained by Mr. Robert Ramsey, operation of the landfill **could cause contamination to a lake** from windblown debris. The language of the rule is crafted to disallow landfills in locations where there is a **threat** of contamination to a lake; there need not even be a significant likelihood of contamination for this siting criterion to come into play. In the present case, the likelihood of contamination is large due to the high winds that regularly occur at this location. As discussed above, winds measured within one-quarter mile of the Proposed Landfill regularly reach over 30 miles per hour and have been recorded at levels exceeding 80 miles per hour this year. The winds come from all directions including the northwest, and, therefore, it is likely that wind would blow debris from the landfill into the Great Salt Lake. The proposed permit, as currently written, does not have specific contingencies for mitigating windblown debris during high wind conditions. Additionally, the proposed fifteen-foot fence is likely insufficient to prevent contamination to the lake. Because the Proposed Landfill is in a location

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[1] For your convenience, I have attached hereto as Exhibit B, a document published by the Utah Division of Wildlife Resources which provides additional information regarding the significance of the Western Hemisphere Shorebird Reserve Designation. It also includes a map showing the proximity of the proposed landfill to the wildlife management areas. *See* Utah Division of Wildlife Resources, *Wildlife Notebook Series No. 6*, "Wilson's Phalarope" (Aug. 1999) (attached hereto as Exhibit C).

that is likely to cause contamination to the Great Salt Lake, permitting this facility would be a violation of the Utah Administrative Code.

Finally, the applicant has not demonstrated its **ability to protect ecological resources** including **impacts on** fish, **wildlife**, and other aquatic resources **and their habitat** from release of the solid waste. The U.S. Fish & Wildlife Service has made clear that the Proposed Landfill does threaten wildlife insofar as it may "act as an attractant for gulls and this may result in an increase in pelican predation at the nearby rookery."

The ecological significance of the Great Salt Lake, the proximity of the Proposed Landfill to the shores of the Great Salt Lake, the fact that the Proposed Landfill will actually be located within WHSRN, impacts to wildlife (including a pelican rookery), and the virtual certainty that the Proposed Landfill will cause contamination of the Great Salt Lake all strongly weigh against issuance of the Class I Permit. The Proposed Landfill simply cannot satisfy the siting criteria.

Courts reviewing challenges to the permitting of proposed landfills which similarly violate siting criteria have denied permits to and enjoined the construction and/or operation of landfills that would endanger wildlife, recreation areas and water resources. In *Sharp v. 251st Street Landfill, Inc.*, 925 P.2d 546 (Okla. 1996), the court upheld a permanent injunction foreclosing the construction and operation of a solid waste disposal facility where there was a likelihood that the operation of the proposed landfill would pollute water resources. *Id.* at 556. Furthermore, in *Entzian v. Prince George's County*, 360 A.2d 6 (Md. Ct. Spec. App. 1976), the court upheld the denial of a landfill permit upon a finding that "the proposed site would adversely affect the environment of the neighboring park, including wildlife marsh lands, and the Patuxent River." *Id.* at 12. Finally, in *Indiana v. Klatte*, 270 N.E.2d 872 (Ind. 1971), the court upheld a temporary injunction to prevent the operation of a landfill where there was a reasonably supported allegation that the operation of the landfill would cause contamination to a river which was adjacent to the landfill site. *See also Birchwood Realty, Inc. v. Grant*, 627 A.2d 827, 833-34 (R.I. 1993) (holding that a failure to comply with solid waste rules serves as a basis to deny a license to a proposed solid waste disposal facility).

MRI's Interests

Family owned and operated since 1969, Mineral Resources International ("MRI") is a leading manufacturer of quality liquid, tablet, and bulk nutritional dietary supplements using minerals and trace minerals harvested from the Great Salt Lake. MRI's products are distributed worldwide through a variety of distribution channels. Many of their products provide significant health benefits.

MRI is working on a new product that could be negatively impacted by the Proposed Landfill.[2] Developing this product in a thin profit margin market requires maintaining low transportation costs. MRI has had favorable discussions with landowners adjacent to the Proposed Landfill who are willing to lease land near the existing rail line. Evaporation ponds currently exist near the site of the Proposed Landfill which could accommodate MRI's operations for extracting brine for the production of this and other products. Unfortunately, contamination from an adjacent landfill and the stigma associated with such a facility would eliminate from MRI's consideration of perhaps the best location in which to expand MRI's operations. This would also result in a substantial loss of tax and royalty revenue to the State.[3]

For the reasons stated above, MRI respectfully requests that the Executive Secretary of the Solid and Hazardous Waste Control Board deny the permit for the Proposed Landfill.

Sincerely,

Craig D. Galli

Attachments

Letter to Dennis Downs_.doc

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[2] More information regarding this proposed new product will be made available in confidential communications.

[3] *See* Letter from Rhoda Boren, CEO, Mineral Resources International, to Dennis R. Downs (Dec. __, 2003).

COMMENTS OF

MINERAL RESOURCES INTERNATIONAL, INC.

ON

PROMONTORY POINT

CLASS I LANDFILL PERMIT APPLICATION

Robert Ramsey PG, REG
Canyon Concepts LLC
2890 E. Live Oak Circle
Holladay, UT 84117

COMMENTS OF MINERAL RESOURCES INTERNATIONAL, INC.
ON PROMONTORY POINT CLASS I LANDFILL PERMIT APPLICATION

A detailed review of the revised Promontory Point Landfill Permit Application has identified a number of serious concerns with the landfill location, engineering report, plan of operations and closure and post-closure plans. The comments below generally follow the chapter and subchapter headings in the permit application.

Chapter I Introduction

1.1 This section states that "Access to the proposed landfill facility would be either by way of Union Pacific Railroad causeway, a private dike, or by a county road...." The Box Elder County Conditional Use Permit sets the following condition in Paragraph 7. "Access to the site shall be limited to the railroad causeway or the GSL causeway. No access shall be allowed on existing county roads."

The applicant has not provided evidence that they have an irrevocable agreement to use the privately owned GSL or Union Pacific causeways or any detail on how the proposed landfill can be accessed without the use of existing county roads. Certainly, proof of land ownership or a lease agreement to use privately owned access to the site is integral to compliance with R315-310-3(1)(c). The applicant has not provided any detail on the feasibility or design of a railroad spur off the Union Pacific mainline. Neither have they provided evidence of an agreement with Union Pacific to do so. Such agreements and design details seem to be a critical step prior to issuing a permit for landfill construction and operation.

Chapter II Facility Characterization

There are serious concerns that the proposed landfill fails to meet several of the basic Solid Waste Facility Location Standards.

Location Standards. Each applicable solid waste facility shall be subject to the following location standards:

(a) Land Use Compatibility. No new facility shall be located within:

(i) one thousand feet of a national, state or county park, monument or recreation area; designated wilderness or wild and scenic river area;

(ii) ecologically and scientifically significant natural areas, including wildlife management areas and habitat for threatened or endangered species as designated pursuant to the Endangered Species Act of 1982;

* * *

(c)(i) No new facility or lateral expansion of an existing facility shall be located on any public land that is being used by a public water system for watershed control for municipal drinking water purposes, or in a location that could cause contamination to a lake, reservoir, or pond.

R315-302-1(2).

The concern is that proposed facility does not meet these standards: the Great Salt Lake is used for a variety of recreational purposes, it is without question an ecologically and scientifically significant natural area, and there is certainly the potential for the proposed landfill to cause

contamination to the lake. These siting criteria appear to have been overlooked or disregarded in the initial review of the proposed landfill location. Specifically,

> the unit will not cause or contribute to significant degradation of wetlands. The owner or operator must demonstrate the integrity of the unit and its ability to protect ecological resources by addressing the following factors: (D) impacts on fish, wildlife, and other aquatic resources and their habitat from release of the solid waste.

R315-302-1(2)(d)(iv).

While strictly speaking, this paragraph relates to wetlands, the Great Salt Lake certainly contains significant wetlands and the intent is clearly to protect impacts to fish, wildlife and other aquatic resources, all of which are present near the proposed landfill. While the applicant has provided some buffer zone between the Great Salt Lake and the closest waste modules, it would clearly be more protective of the environment to move the proposed location at least one mile away from the lake. Based on information provided in the application, the applicant apparently owns or controls land to the north and east of the proposed landfill location which could allow relocation of the facility.

> The applicant of the proposed facility will make the demonstration of ground water quality necessary to determine the appropriate aquifer classification.

R315-302-1(2)(e)(iv)(C).

The applicant has made several statements with respect to the poor quality of groundwater beneath the proposed landfill. The standard that the applicant uses to determine the quality of groundwater is the mineral level; however, the minerals currently present in the groundwater are the minerals one would expect to find adjacent to the Great Salt Lake. While this water is not suitable for drinking water, it is not contaminated. The applicant has installed monitoring wells at the site, yet has provided no laboratory analytical results to enable an accurate characterization of the local groundwater quality and appropriate aquifer classification.

Chapter III Geohydrologic Assessment

3.1.4 This section discusses historic lake levels but does not mention the most recent high water level of 4212 feet above mean sea level. It is not clear from the drawings in the application that the proposed landfill waste modules have been located at least 1000 feet from the 4212 foot high water mark. As stated above, a more appropriate location for the proposed landfill would be at least 1 mile from the lake.

3.2.1 Regional Geohydrology, and 3.2.2 Local Geohydrology

The applicant states that water for site operations would be provided from local sources. It is stated that a local spring source has been equipped with a tank which will be upgraded for operational use at the landfill. The applicant provides no information on either the quality (except to say that it is poor) or quantity of water available from this spring source. Without more specific information and testing of these sources, it is not possible to determine if there will be sufficient water for operational requirements such as dust suppression and firefighting. The availability of dependable sources of water for operational use should be a critical consideration in the siting, feasibility and approval of the proposed landfill facility.

To satisfy the requirements of R315-310-4(3), further investigations of the spring source should be conducted, prior to the issuance of a permit, to confirm the long-term sustainable yield of the

water supply for both operational and fire protection purposes. Preliminary design plans on the water supply system, including location, required flows for both operations and fire suppression, storage volume requirements, distribution system including location of fire hydrants, anticipated water pressure requirements, etc., should be provided in the Engineering Report, Chapter IV.

R315-310-4 requires specific information on local geology and hydrology. The applicant states that "groundwater in the Promontory Point area is not considered a discrete hydrologic unit." However, water-level data from monitoring wells 1-5 suggest otherwise. Certainly, there is enough data and information from the well borings to prepare a groundwater-level contour map specifically for the landfill site. This would provide more site specific detail than the generalized regional groundwater movement shown in Figure 3.7. Water levels in the monitoring wells suggest that there is continuity of groundwater at least between the wells in the lower and middle portion or the proposed landfill. Clearly, more analysis of the data obtained from these and other nearby wells should be developed and/or presented. This information and analysis should include, but not be limited to, accurate elevation control, pump testing and recovery data, soil and bedrock permeabilities, groundwater flow rates and background water quality analyses as required in R315-310-4(2)(b).

Groundwater Monitoring Wells

The application does not have a specific section devoted to the groundwater monitoring system. No discussion has been provided as to the rationale for placement or whether additional wells are contemplated. The applicant has installed four monitoring wells in the general topographic downgradient direction, as shown on Figure 3.1. It is not clear that these wells, as located, would detect contaminant migration from more than four of the nine front line modules. Because the projected life expectancy of individual modules ranges from 2-4 years, and because the proposed downgradient boundary is nearly 5000 feet long, monitoring wells should be constructed immediately downgradient from each of the front line modules. That is, one monitoring well for each downgradient module (Nos. 1,2,3,4,9 10 and 11), as shown in Figure 4.1.

The application provides no information on monitoring well installation techniques (drilling, construction, decontamination) used to construct the monitoring wells. This is necessary to assure that the wells will provide valid samples of groundwater quality and is required by R315-310-4.

Chapter IV Engineering Report

4.4 Location Standards

In this section, the applicant references a letter, contained in Appendix F, from the US Fish and Wildlife Service (USFWS) with respect to location standards. The implication is that the USFWS supports the location of the proposed landfill. In fact, the USFWS raises a number of concerns and provides recommendations to mitigate these concerns, including:

1) "The Service believes that a site specific wildlife analysis should be conducted."

2) "The Service recommends a plan that would maximize the wildlife value of the buffer strip surrounding the landfill... Not only could this buffer area provide valuable habitat during the life of the project, it could be an important seed/colonization source for plants and wildlife after the landfill has been reclaimed."

3) "The service is concerned with the potential impacts the landfill may have on the nearby gull and pelican colonies. Specifically, we are concerned that the

landfill could act as an attractant for gulls and this may result in an increase in pelican predation at the nearby rookery. We recommend a literature review to see what similar impacts may have occurred at other landfills and what measures were taken in those instances to mitigate impacts."

4) "We suggest that the proponent explore the use of non-lethal barriers for excluding gulls and other birds and wildlife from exposed evaporation ponds."

5) "The Service strongly recommends that waste be bailed or otherwise contained prior to transport to the proposed facility and that a monitoring protocol be developed to assess the amount of waste escaping the landfill and subsequently landing in the Great Salt Lake. There are a multitude of common trash items that are known to be deadly to birds and other wildlife. Any means by which to reduce exposure of these items to wildlife would improve the project."

In response to the concern about gulls, the applicant commissioned a literature review by the Frontier Corporation. Its study, dated August 18, 2003, was not included in the application. The study recommended management practices that minimize the amount of exposed waste to reduce gull foraging and other lethal and non-lethal methods of harassment and control.

The applicant has not provided any detail on how the USFWS or Frontier Corporation recommendations would be incorporated.

Another letter contained in Appendix F-Cultural and Environmental, prepared by Applied Ecological Services, Inc., makes reference to an Environmental Assessment prepared for the proposed landfill at Promontory Point. It is curious that a letter supporting and clarifying the Environmental Assessment (EA) is included, yet the EA has not been included in the application, nor for that matter, referenced in any other way. If the applicant has had an Environmental Assessment prepared for the proposed landfill, it should be included in support of the permit application.

4.4.1 Land Use Compatibility

The applicant states that the proposed landfill and related facilities conform to the location standards outlined in R315-302-1. Further, the applicant states that the site is not located in an ecologically or scientifically significant natural area.

We strongly disagree with this conclusion. The Great Salt Lake is both an ecologically and scientifically significant natural area.

The applicant states that the landfill complies with R315-302-1(2)(c)(i) but fails to mention or note that the landfill is sited in a location that could cause contamination to a lake in violation of the rules. In fact, the USFWS in the letter cited above, essentially says it's a foregone conclusion that waste escaping the landfill will end up in the Great Salt Lake.

The proposed location of the landfill clearly fails the Location Standard as defined in R315-302-1(2)(c)(i).

4.5 Design Approach and Objectives

4.5.1 General Cell Design

The applicant states that soil for daily, intermediate and final cover would be obtained from cell excavation, the buffer zone, and a borrow area in Little Valley. Removing soil from the buffer

area will destroy wildlife habitat, a key concern raised by the USFWS. The applicant states that a significant amount of material would come from Little Valley, but provides no evidence of land ownership or lease agreements to assure availability of this source. Further, there is no information provided as to the quantity of soils available from Little Valley or, the suitability of the soils for daily, intermediate or final cover.

Insufficient detail is provided on the method of daily or intermediate cover placement. The proper placement of daily and intermediate cover is critical to control of disease vectors, gull populations and wind-blown refuse. No discussion of volumes of daily cover stockpiles or soil characteristics is provided.

The applicant mentions the possible use of alternative materials for daily cover but fails to provide any detail on the characteristics or acceptability of these materials.

The application does not include adequate discussion of quality control/quality assurance for engineered structures or features at the solid waste disposal facility or for all monitoring activities as required in R315-310-4.

4.10 Wind Erosion

The applicant states that the site is subject to changing prevailing winds, but the predominant winds are from the southwest. No other information about wind or weather patterns is provided. Based on data collected from the Promontory Point Weather Station located directly above the proposed facility, it is misleading to claim that there is a predominant wind direction from the southwest; in fact, the winds regularly come from all directions as shown in the attached Windspeed and Direction plots. The Great Salt Lake is subject to frequent intense storms during certain times of the year. As passing weather systems move across the lake, winds will frequently shift direction by 180 degrees. It is common for winds to come from the northeast and northwest with gusts exceeding 30 to 50 mph. Strong winds from the northeast and northwest will pose a serious threat of blowing refuse escaping the landfill and depositing in the Great Salt Lake. High wind events, that is, wind events above 30 mph, occur almost weekly and, sometimes daily, during certain months of the year. Extreme wind events, 50 mph and above, happen several times a year. In 2003, there was one event with 80+ mph winds. Neither this section of the application nor the plan of operations provide any detailed information on wind conditions or what operational measures would be taken to prevent waste from escaping the site during periods of high winds. As stated earlier, this is a critical concern in relation to the proposed siting of this landfill adjacent to the Great Salt Lake.

Chapter V Plan of Operations

Aside from siting and engineering considerations, the Plan of Operations should be one of the major chapters in the landfill application. In addition to fulfilling the regulatory requirements, the intent of the plan is to provide a reference and guidance document for landfill personnel who will be conducting the day to day operations. The level of detail and the degree of thoroughness provided in the Plan of Operations is an indication of the owners' philosophy on operational management of the landfill once permitted. In this regard, the Plan of Operations submitted by the applicant completely misses the mark. The plan is vague and provides insufficient detail to serve as guidance for the landfill operator and personnel. The plan uses words such as "could, would and may" rather than stating what "will" be done.

The Plan of Operations fails to fully address the requirements of R315-302-2(2). Specific sections that are missing or incomplete are discussed below.

Schedule of Construction: As required in R315-302-2(2)(a) and in the Box Elder County Conditional Use Permit the plan does not contain a schedule of construction.

5.3 On-Site Waste Handling Procedures

The application does not adequately discuss the size of the tipping face or placement of daily and intermediate cover material. These procedures are of critical importance in keeping exposed waste to a minimum, as well as managing and controlling disease vectors and gull populations. The tipping face should be kept as small as possible while still allowing for efficient traffic patterns and safe operations. At efficiently run operations, the tipping area is often no more than ¼ acre.

The application provides only a single sentence describing waste handling that states "Incoming refuse directed toward the landfill would be deposited at the working face under the direction of the Landfill Manager or Senior Operator." The plan provides no detail on procedures for placement of refuse within the working area, the thickness of individual refuse lifts and methods to achieve appropriate compaction. There is also no discussion of how daily cover will be applied to assure proper cover of waste materials to control disease vectors and bird populations.

There is no discussion of how or where cover materials will be stockpiled or the volume of cover material to be kept on hand (as in a minimum stockpile of 30 or 60 days operation). This would include having sufficient stockpiled soil to handle emergency operations such as burning refuse or interim cover during high wind events.

Although this concern has been raised by several agency reviewers, there is no discussion of how gull and other bird populations will be managed or controlled in the landfill and evaporation ponds. Because of the widespread concern with this issue, the application should provide a separate section describing control measures.

5.4 Monitoring Schedule

This section references the Monitoring Plan in Appendix M. The appendix discusses the detection phase monitoring for groundwater but omits any discussion of sampling and analysis of groundwater to determine background water-quality conditions during the first year of operations as required in R315-308-2. The groundwater monitoring plan provides no discussion of procedures and techniques for well construction and completion, decontamination of drilling and sampling equipment, or procedures to ensure employee health and safety during well installation and monitoring. The plan fails to discuss any statistical method for determining whether a significant change has occurred as compared to background conditions as also required in the regulations.

5.6 Contingency Plan

5.6.1 Fire and Explosion

This section of the application discusses how burning refuse will be controlled, but fails to consider or address other potential fire or explosive situations such as vehicle, equipment or facility fires. It also appears that the applicant has not included any dedicated firefighting equipment in the equipment list, Table 5.1. Because this facility is so remote, dedicated firefighting equipment and appropriate training for all landfill personnel should be provided.

5.7 Alternative Waste Handling and Disposal Plan

Typically, alternative waste handling procedures include provisions for temporary equipment breakdown, wet weather conditions, storm events, etc. The plan only considers a total shut down of operations and fails to provide any guidance for other potential situations.

5.8 Procedures for Controlling Disease Vectors

The Utah Landfill Permit Application Form submitted by the applicant states that the only waste intended for disposal is Municipal Waste. Consistent with the Permit Application Form, the applicant, in this section, states that "special wastes will be excluded from the landfill". Further, the application provides no special facilities or direction in the Operating Plan for the handling and disposal of special wastes as defined by R315-301-2(71) or industrial waste as defined by R315-301-2(35). The Draft Solid Waste Permit has been prepared for a Class I Landfill but has been specifically written to allow handling and disposal of industrial wastes and special wastes. Either the draft permit needs to be corrected or the application must be modified to address handling and disposal of industrial and special wastes.

5.10 General Training and Safety Plan

Since training is intended to consist of on-job-training coupled with classroom training sessions within the first three months of employment, one would expect to see an established set of experience and qualifications criteria for each landfill employee classification. Both the landfill manager and operators should be required to have an appropriate minimum number of years of prior landfill experience. The landfill manager, in addition to having completed the Manager of Landfill Operations course offered by Solid Waste Association of North America ("SWANA"), should have several years of prior landfill operations/management experience. Establishing these criteria in the Plan of Operations will assure qualified personnel are selected.

Chapter VI Closure and Post-Closure Plans

Although Figure 4.1 includes a table of life expectancies for the 33 proposed modules, the application did not include a closure schedule as required by R315-310-4.

6.2 Final Cover and Grading

The Geotechnical and Geologic Study (Appendix D) provided consolidation and gradation analyses of test pit excavation samples, but no vertical permeability analysis of the proposed final cover soils and geotextile materials was provided to assess the adequacy of the final cover.

6.3 Opinion of Probable Costs for Closure

The estimates of probable closure costs are required to include the cost of closure of the largest area of the disposal facility ever requiring a final cover at any time during the active life in accordance with the closure plan and must include post-closure care for a period of 30 years as directed by R315-303-3 and R315-309. The probable closure cost estimate presented in the application considers only the costs for closing and long term monitoring and maintenance for <u>one</u> 20 acre module. This approach seriously understates the total cost of closure and post-closure care and does not comply with the requirements of R315-303-3 and R315-309. Further, R315-310-4 requires not only a cost estimate for closure and post-closure care, but cost calculations for each. The cost estimate shown for post-closure care appears to be low and contains no detail on the various elements required for post-closure care or, how the costs were calculated.

The application also does not include the name, address and telephone number of the person or office to contact about the facility during the post-closure care period as required in R315-310-4.

The revised Promontory Point Landfill Permit Application is deficient in each of the ways described in these comments. In sum, there are problems with the assumptions that went into the application, the scientific bases for some claims in the application, the claimed compliance

with the requisite location standards, the operation plan for the facility, and the closure and post-closure plans for the facility.

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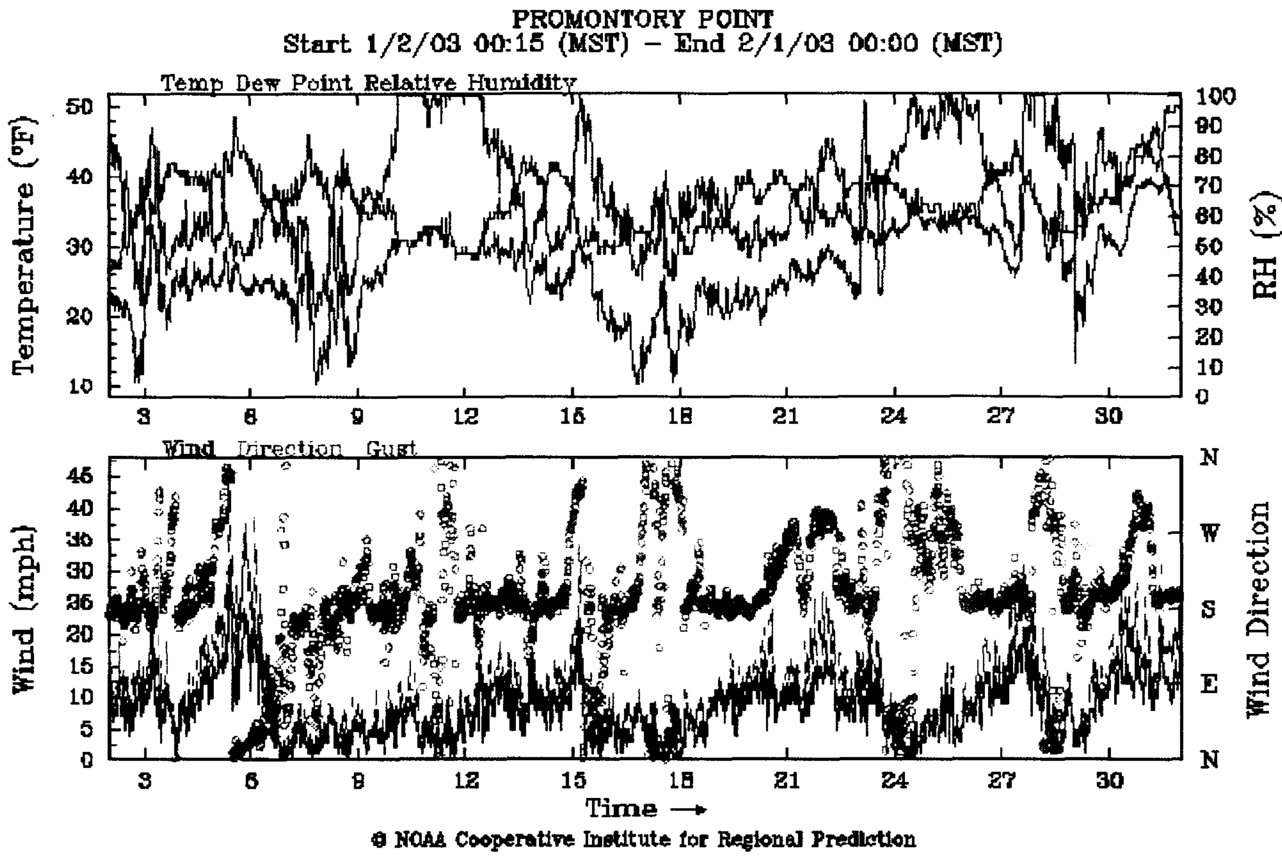

(coming from this direction) Standard meteorological meaning)

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max 45 1

Dec 2002-2003

130 days w/ winds over 30mph

10 days w/ winds over 50

1 day w/ winds over 80

MesoWest Department of Meteorology

Steve Ridzon

581-7091

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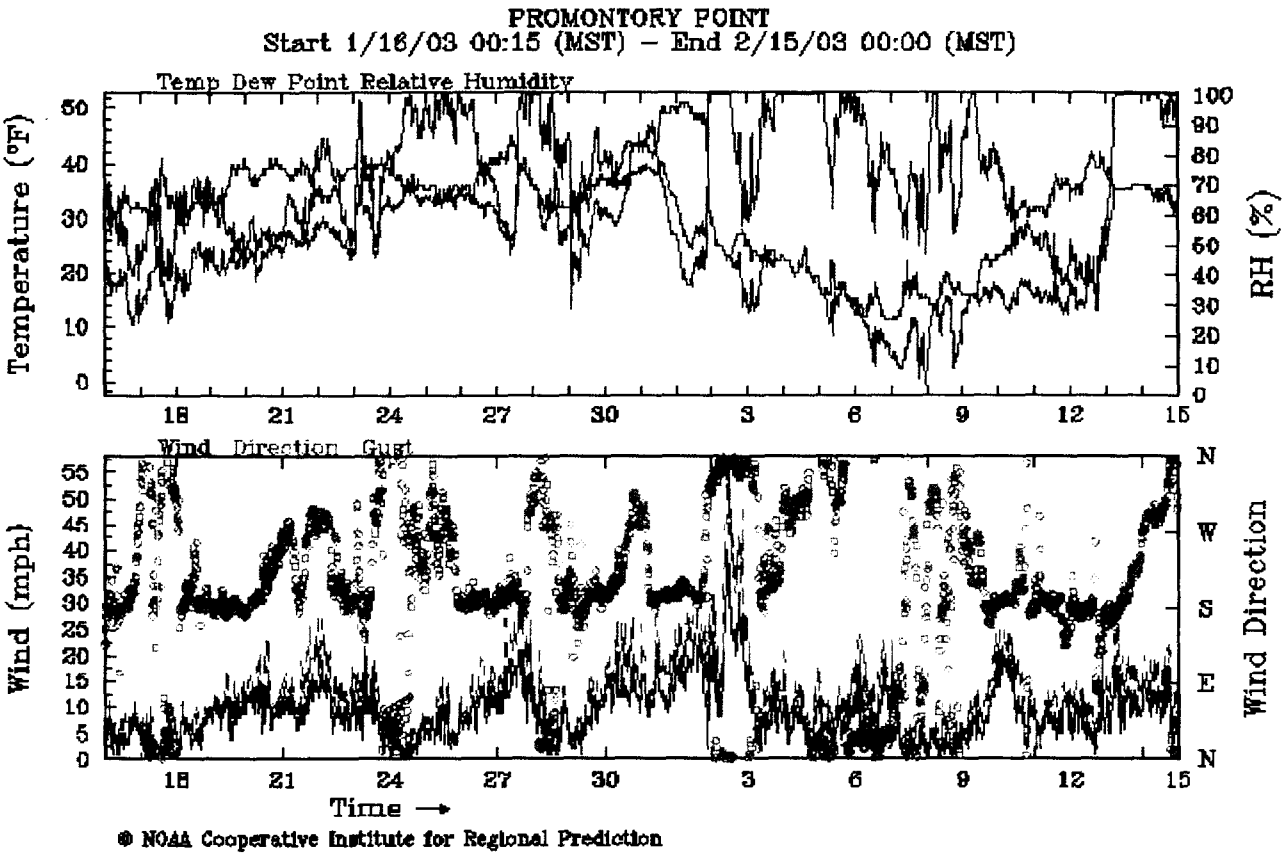

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MesoWest Department of Meteorology

For Questions or Comments about this page or MesoWest contact mesowest@met.utah.edu

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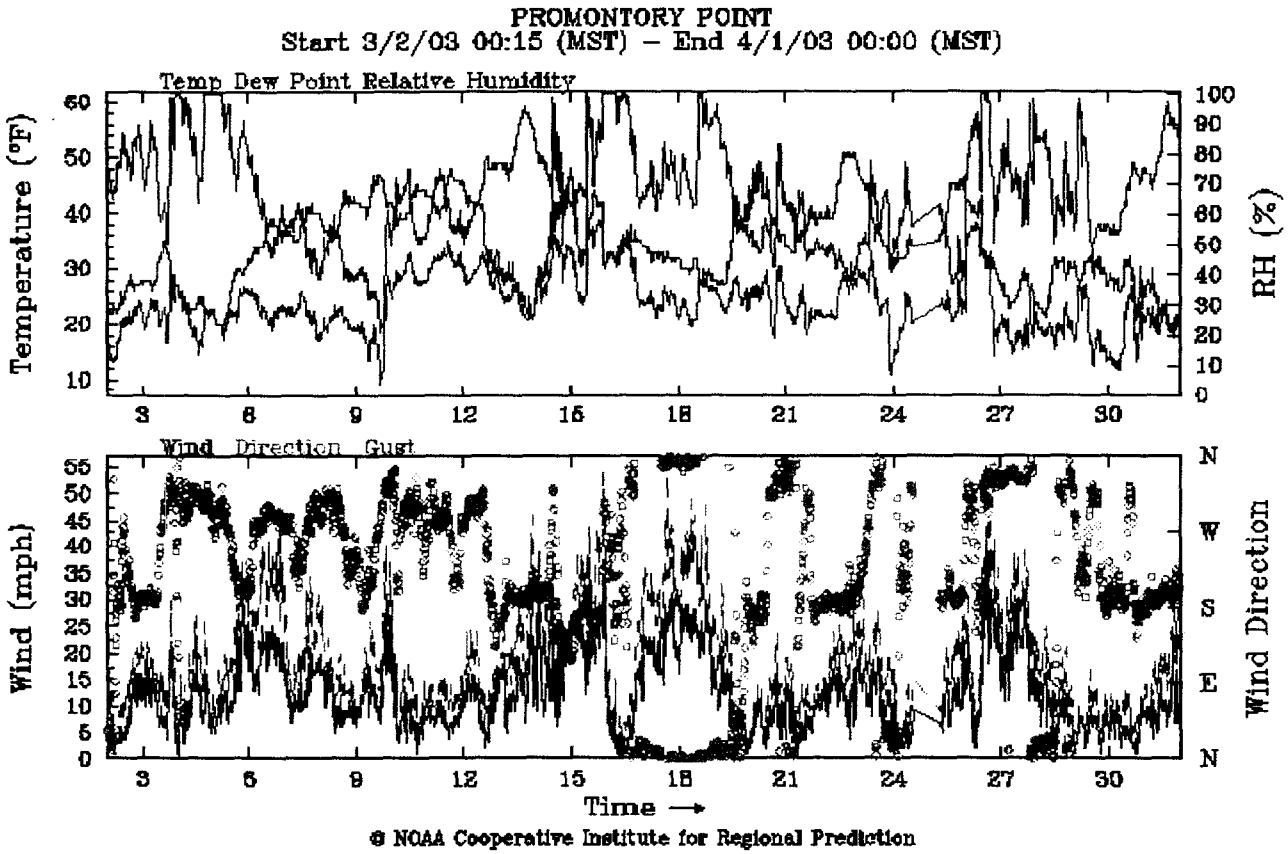

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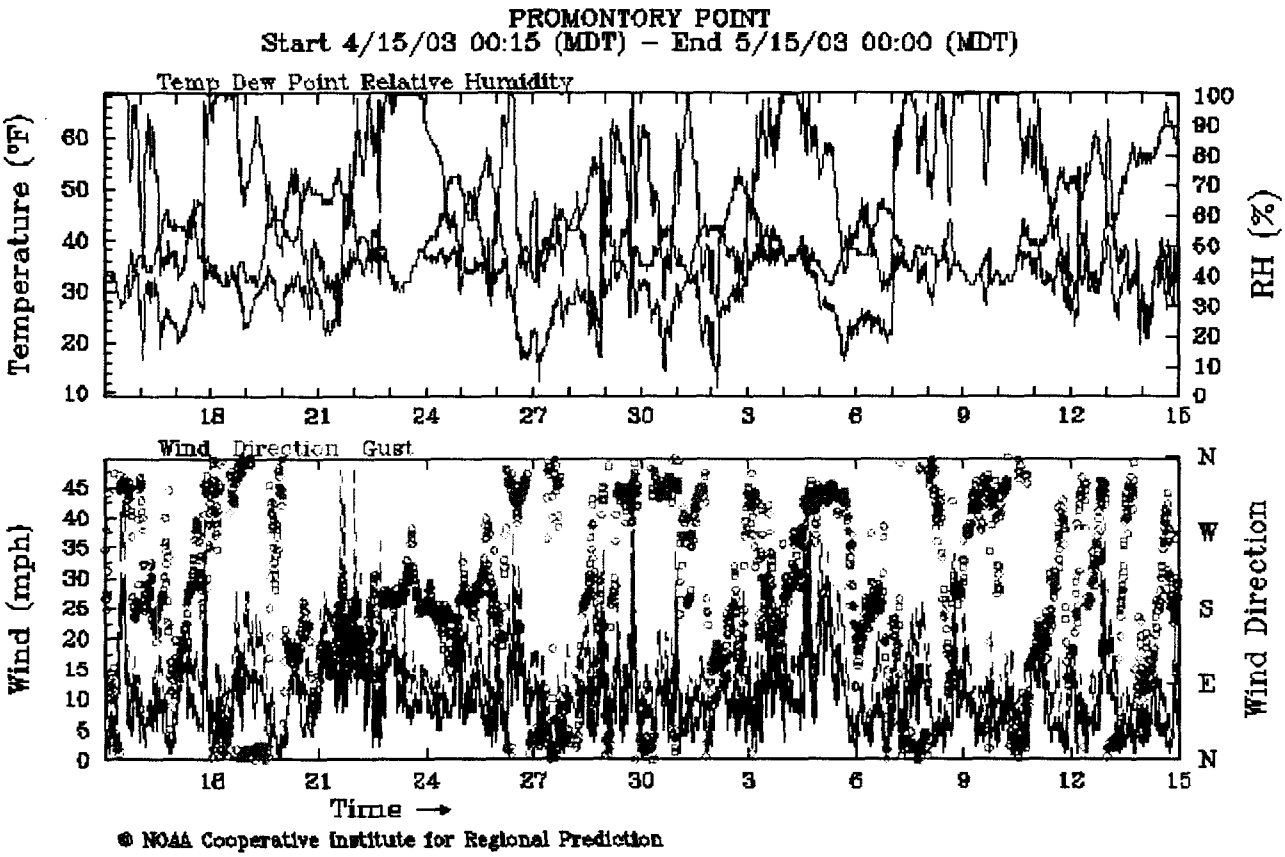

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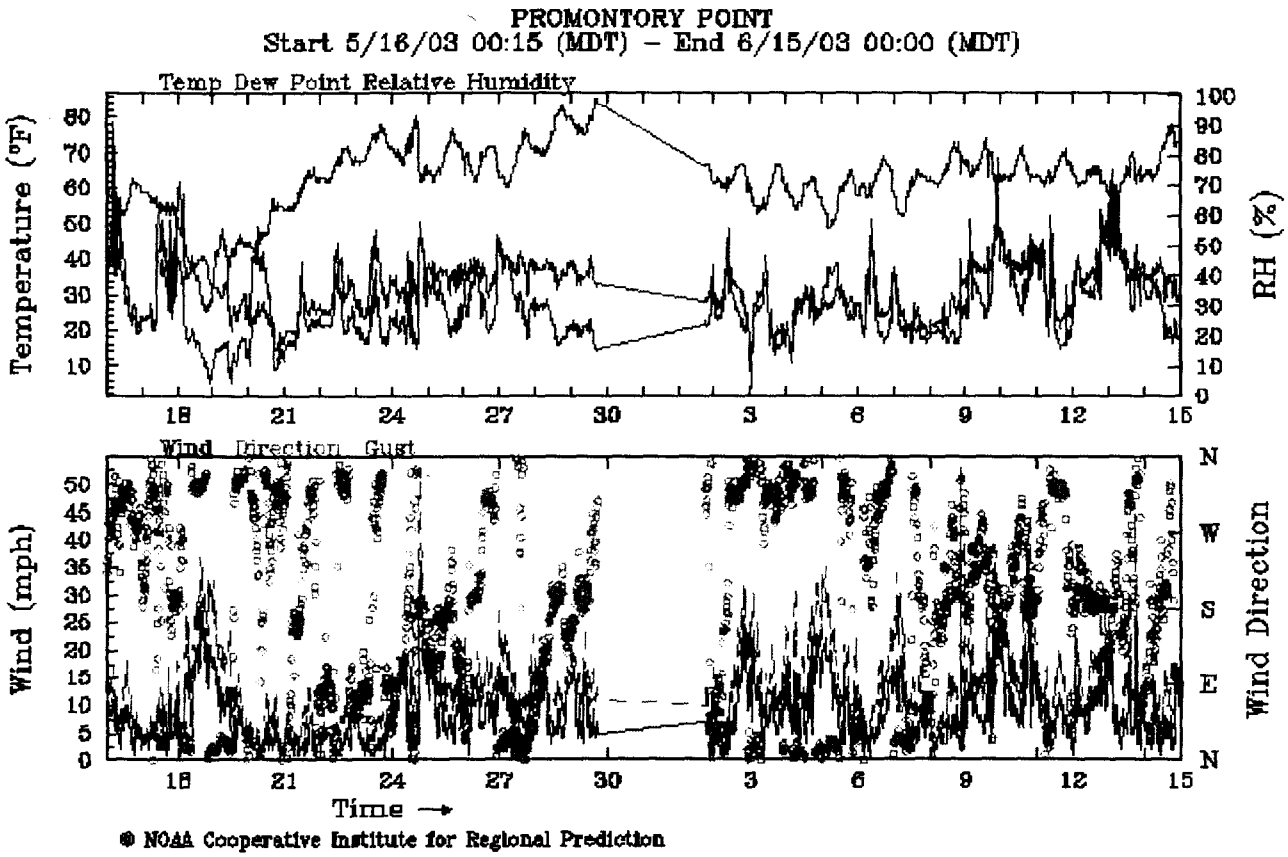

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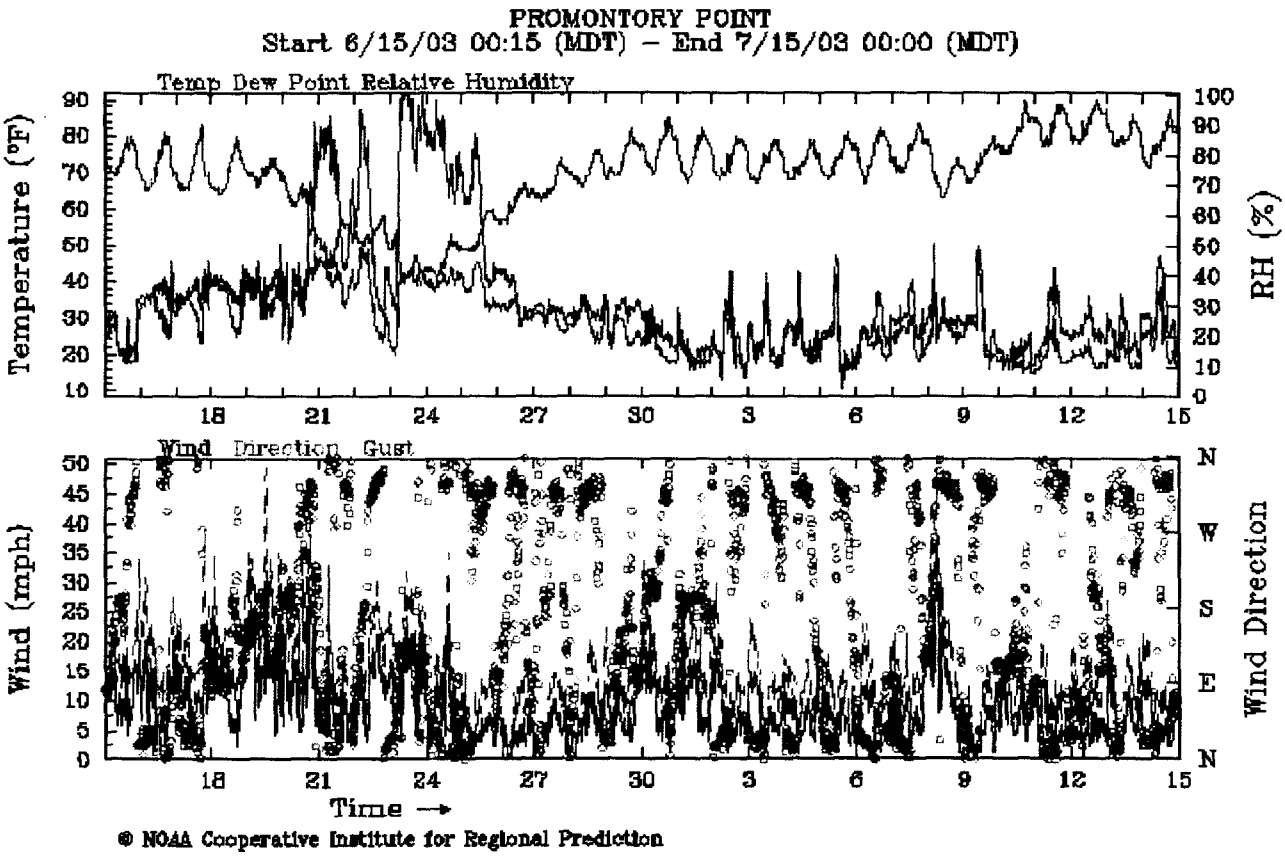

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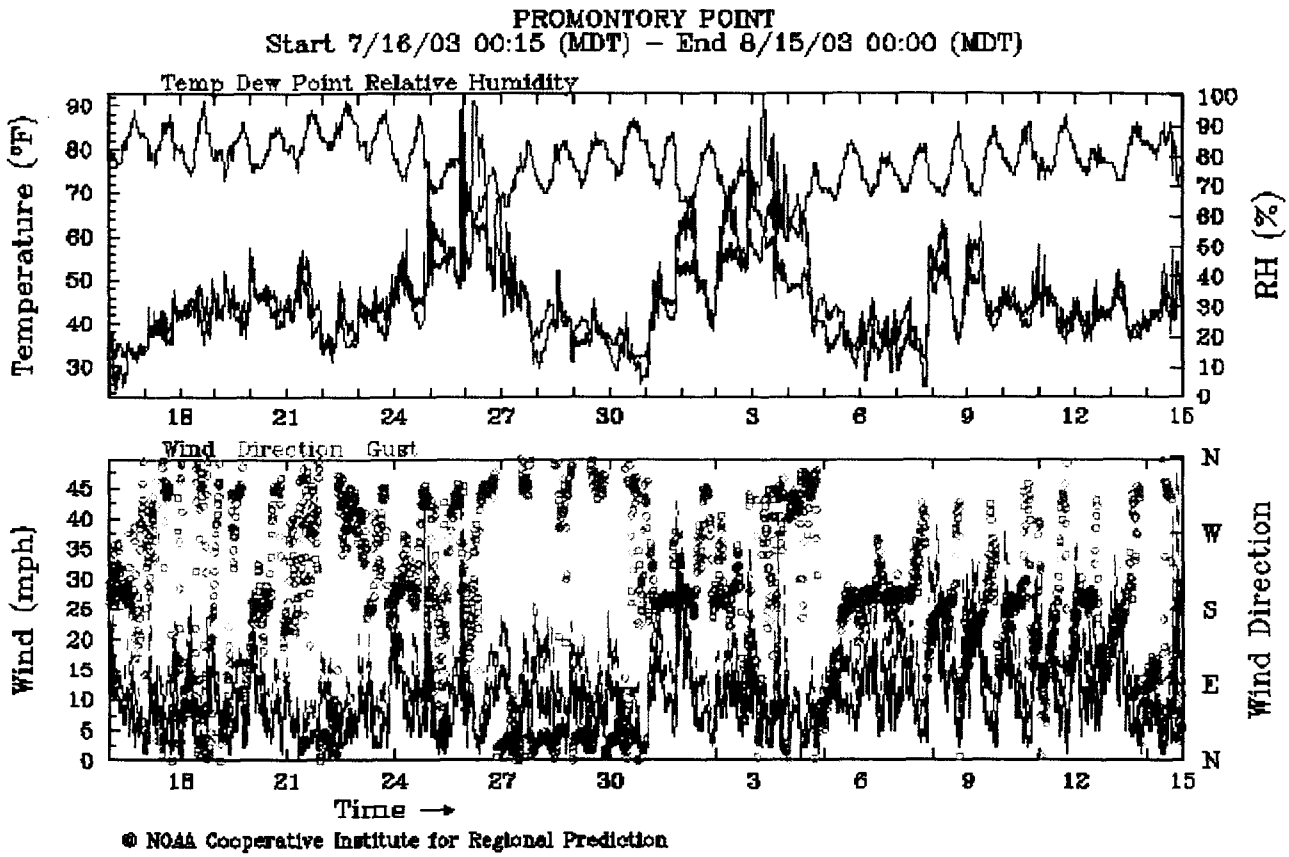

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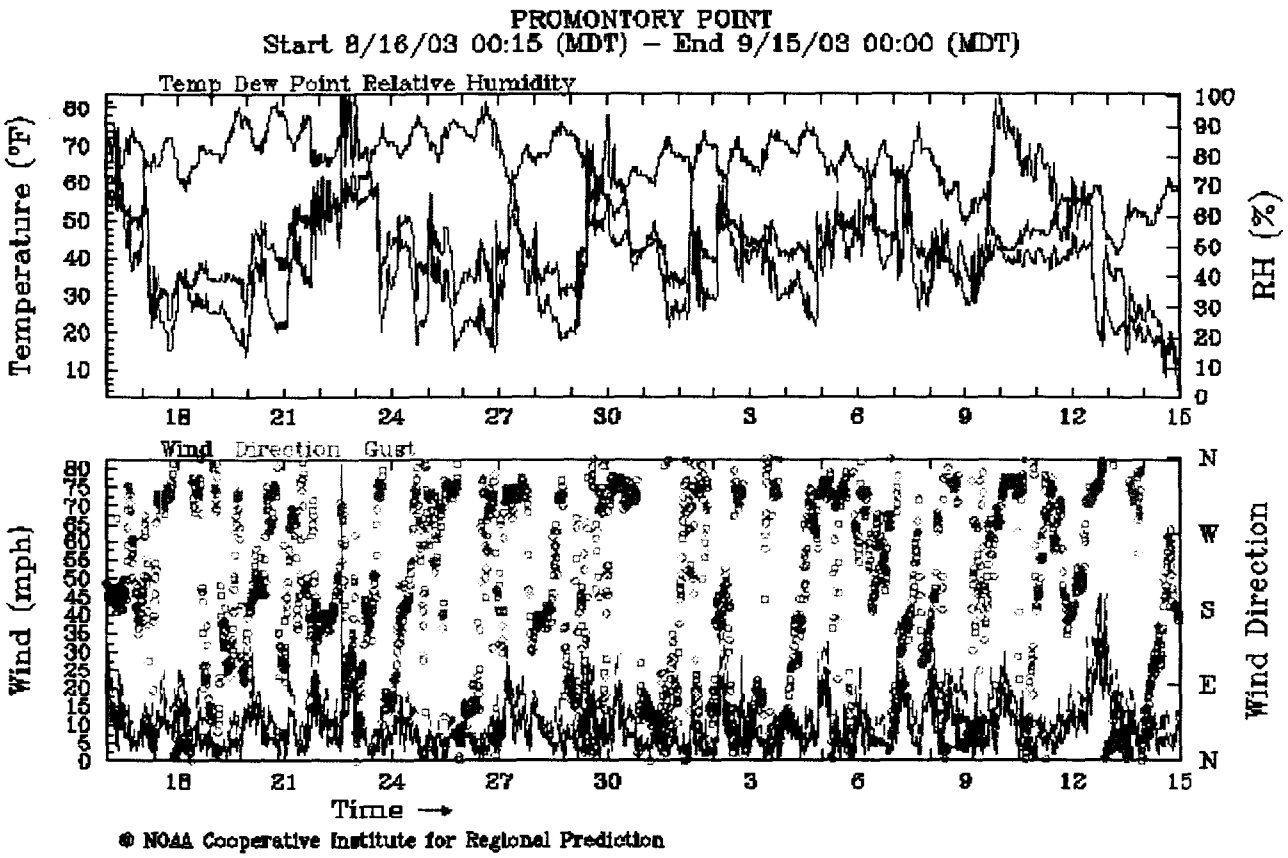

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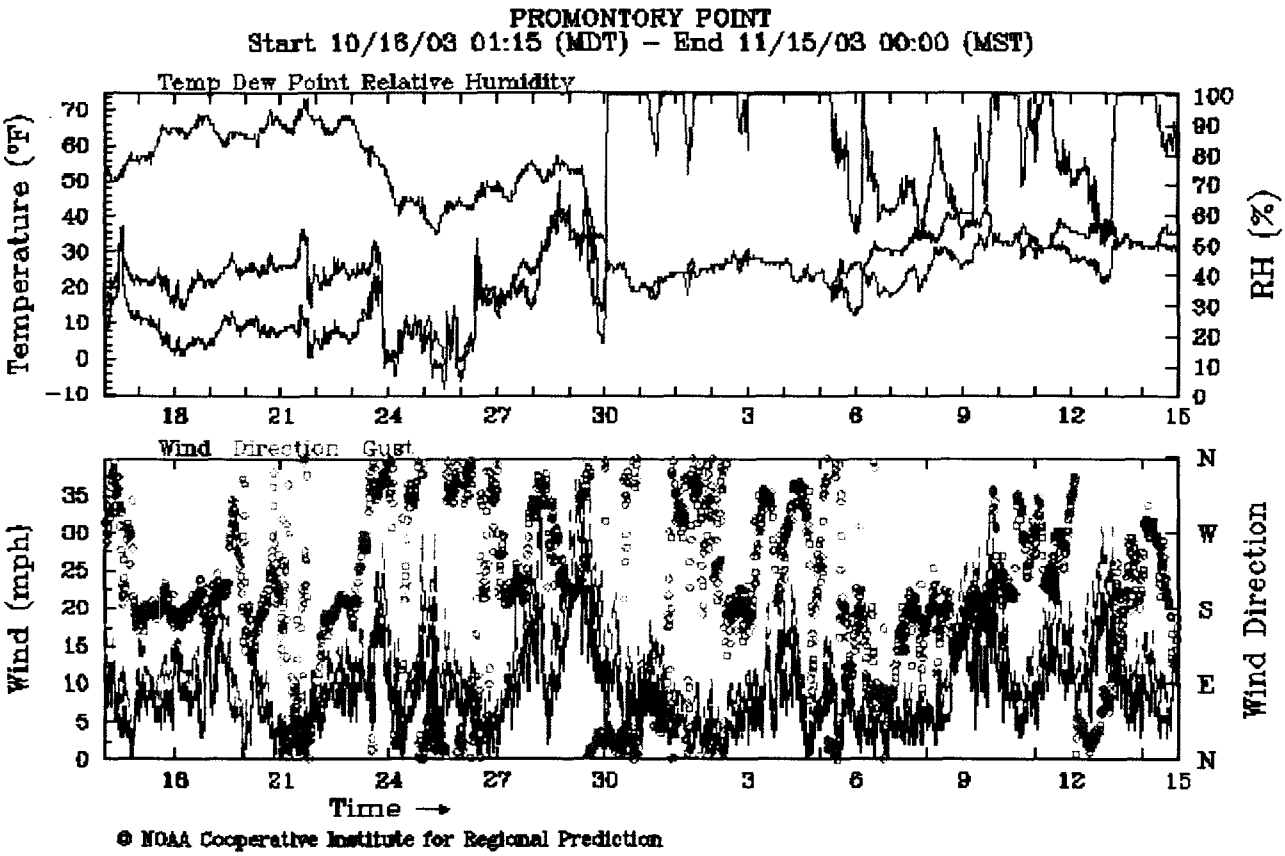

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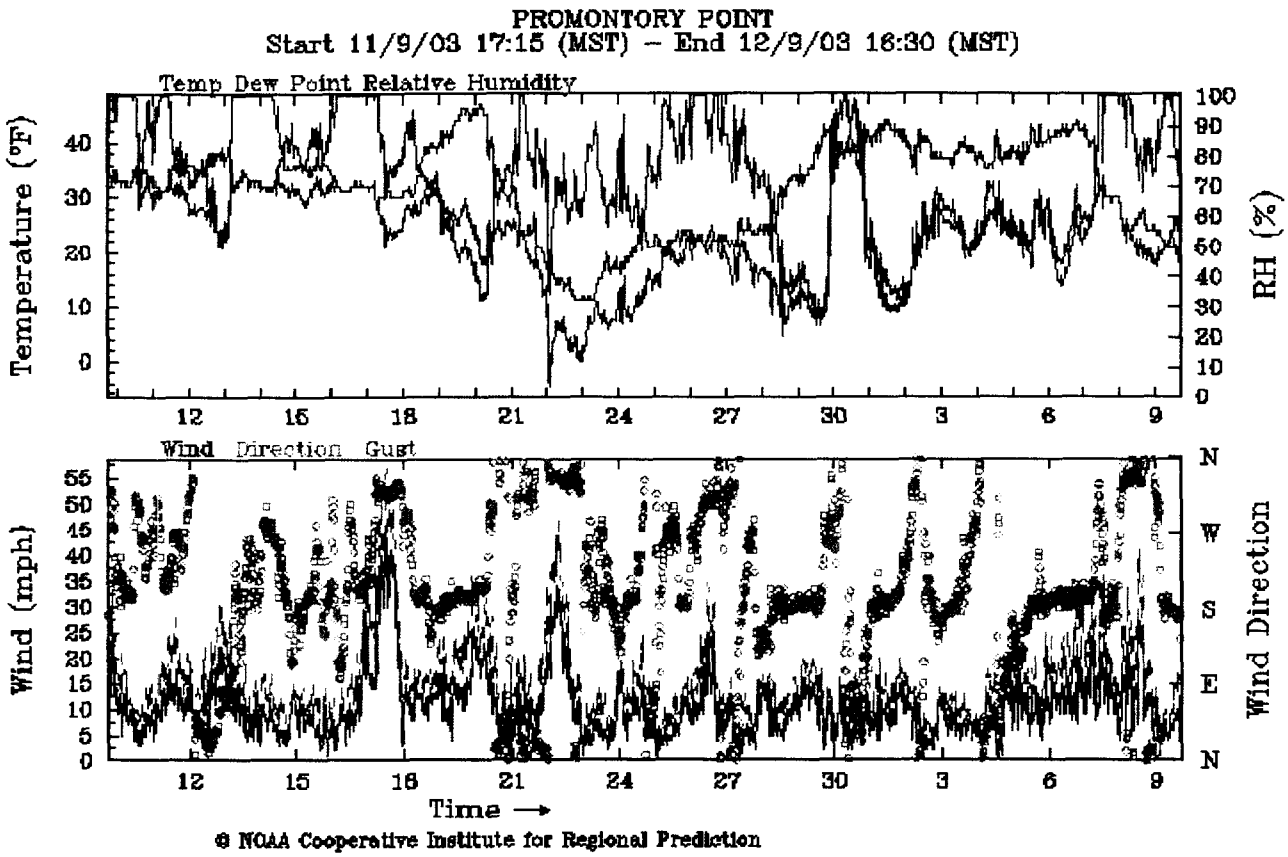

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MesoWest Department of Meteorology

For Questions or Comments about this page or MesoWest contact mesowest@met.utah.edu

EXHIBIT B

The Great Salt Lake Is Recognized as a Western Hemisphere Shorebird Reserve

The Great Salt Lake ecosystem was officially recognized by the Western Hemisphere Shorebird Reserve Network (WHSRN) as a Hemispheric Site in the spring of 1991. This significant designation identified the Great Salt Lake as a valuable link in an international chain of sites that provide critical habitats for shorebirds.

The WHSRN is a voluntary collaboration of over 140 government and private organizations that are committed to shorebird conservation. The WHSRN recognizes that wetlands are among the world's most productive environments, providing tremendous natural and economic benefits. Shorebirds rely on these areas for their survival and serve as indicators of our quality of stewardship.

Currently, WHSRN Reserves collectively protect over 30 million shorebirds and nearly 10 million acres of critical habitat. WHSRN sites include 40 reserves in Argentina, Brazil, Peru, Surinam, Mexico and Canada, and 23 sites in 16 U.S. states. The "Hemispheric" site designation of the Great Salt Lake is the highest of three WHSRN recognized levels. Sites are classified according to the number of shorebirds hosted. "Hemispheric" sites, which are fewest in number, provide vital habitat for at least 500,000 birds every year. The other two recognized levels are "International" sites, which host at least 100,000 shorebirds per year and "Regional" sites, which host over 20,000 shorebirds per year. As a network, the WHSRN sites represent the most critical areas where limited funds and time must be focused to conserve migratory shorebirds and the vital wetland habitats upon which they depend.

The Great Salt Lake ecosystem qualifies for this international recognition because it supports well over two million shorebirds as well as at least three and a half million waterfowl. The World's largest staging concentration of Wilson's phalaropes (over 500,000 birds), 300,000 red-necked phalaropes and 250,000 American avocets highlight the 30 species of shorebirds that depend upon the Great Salt Lake for feeding, migration and breeding. In mid to late summer, these species congregate on the lake in dramatic numbers, totaling more than a million individuals at times.

In further acknowledgement of the hemispheric significance of the Great Salt Lake to migrating shorebirds, the Great Salt Lake has been identified as a Sister Reserve to Laguna del Mar Chiquita in Argentina. Along with other shorebirds, more than 500,000 Wilson's phalaropes winter on this South American lake. The Sister Reserve designation highlights the international and ecological union between these two sites and emphasizes the importance of the hemispheric chain of habitats critical to shorebird survival.

The Great Salt Lake is also linked with Chaplin Lakes in Saskatchewan, Canada and Marismas Nacionales in western Mexico to cooperate in shorebird population monitoring, habitat management and public outreach and education programs. These three sites each host American avocets, black-necked stilts and other shorebirds at different times of the year.

For more information about the WHSRN, write the Manomet Center for Conservation Science, P.O. Box 1770, Manomet, MA 02345. Details about the WHSRN and shorebird conservation are also available at http://www.manomet.com/whsrn.htm. For more information about the Great Salt Lake and its designation as a Hemispheric Site, contact the Avian Program Coordinator of the Utah Division of Wildlife Resources.

Wildlife Notebook Series No. 6 written and edited by Brenda Schussman; reviewed by Don Paul, Great Salt Lake Wildlife Biologist, and Frank Howe, Avian Program Coordinator; and illustrated by Jill Rensel. (Images may not be reproduced)

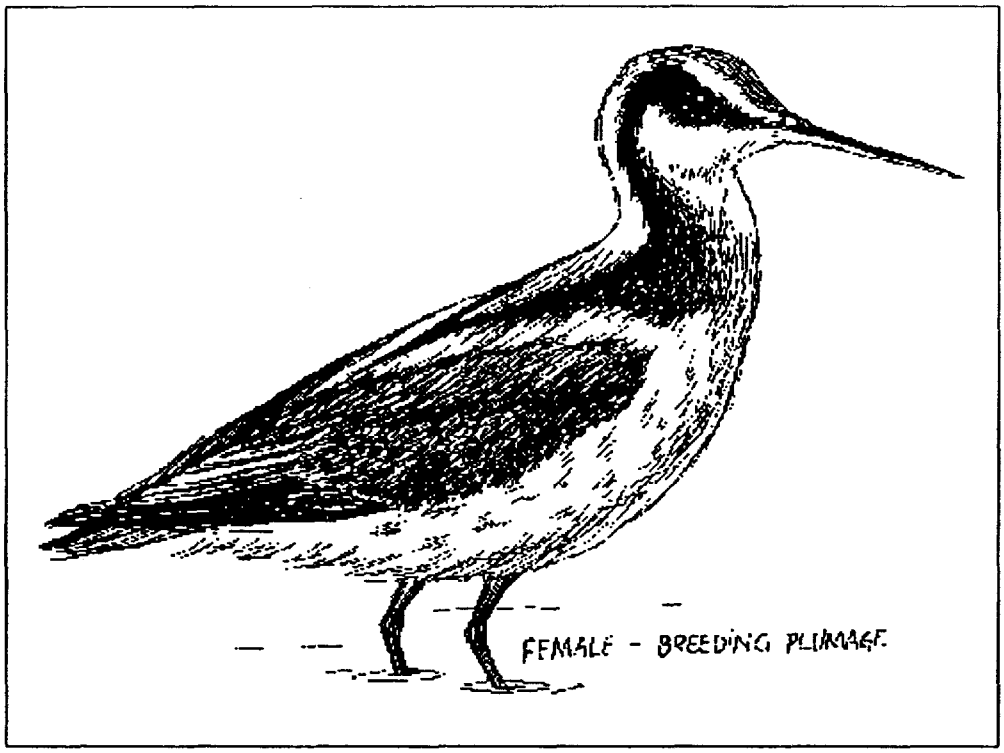
STATE OF UTAH
NATURAL RESOURCES
Division of Wildlife Resources

August, 1999

EXHIBIT C

Wilson's Phalarope

(Phalaropus tricolor)



In recognition of the tremendous value of the Great Salt Lake ecosystem to Wilson's phalaropes and other shorebird populations, the Western Hemisphere Shorebird Reserve Network has designated the Great Salt Lake as a Hemispheric Site.

The Wilson's phalarope is a small wading bird which migrates through Utah in extremely large numbers. More than 500,000 of these shorebirds visit the Great Salt Lake annually, relying heavily on the rich food resources available in the productive wetland and aquatic habitats of the saline lake. The Great Salt Lake is the largest staging area in the world for Wilson's phalaropes.

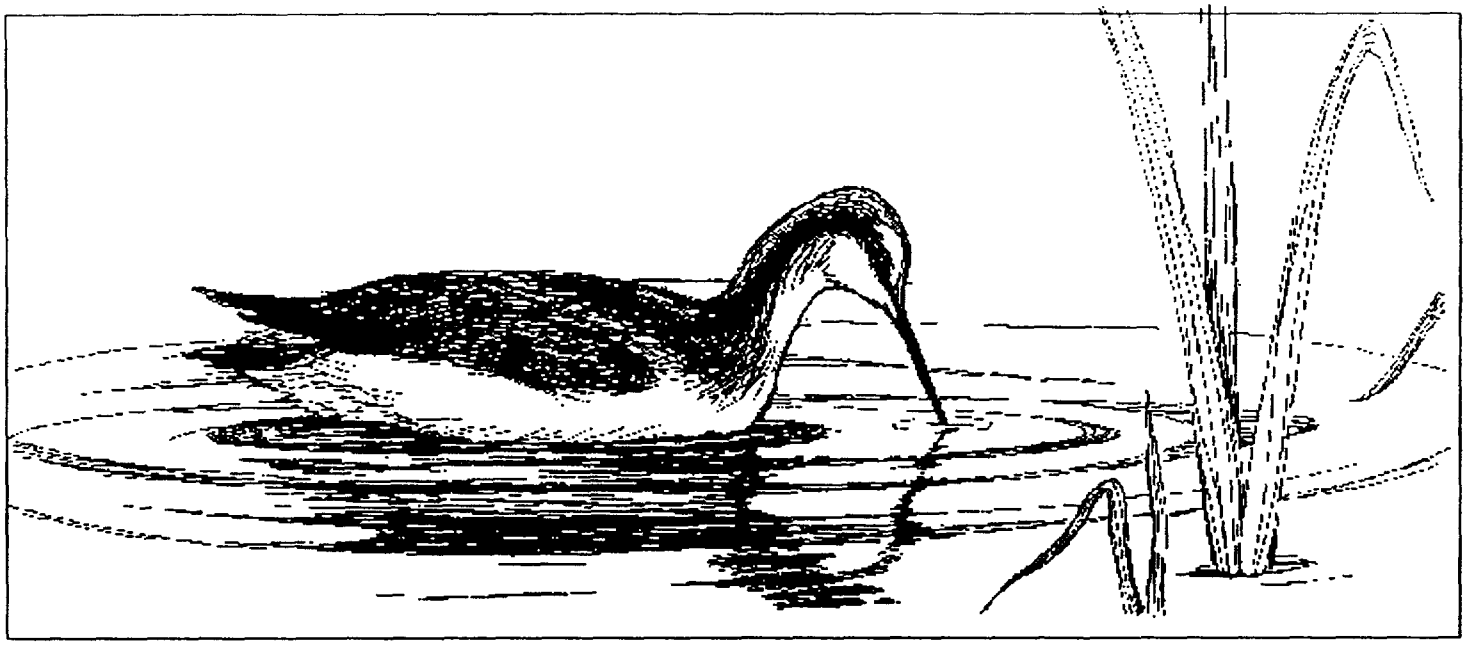
Wilson's phalaropes are just one of many shorebird species which depend on the Great Salt Lake as a valuable source of food and as a staging area where they feed, rest and molt at critical times during long range migrations. In all, the Great Salt Lake may attract two to five million shorebirds each year, including Wilson's and red-necked phalaropes, American avocets, black-necked stilts, long-billed dowitchers, snowy and black-bellied plovers, marbled godwits, willets, sanderlings, western sandpipers, Baird's sandpipers and least sandpipers.

Description

There are three species of phalaropes in the Family Phalaropodidae, including the Wilson's phalarope, red-necked phalarope and the red phalarope.

Wilson's phalaropes *(Phalaropus tricolor)* are the largest of the three phalaropes, ranging from 7 1/2 to 10 inches in length. Wingspread averages 14 1/2 to 16 inches. Phalaropes vary in weight from 1 3/4 ounces for males to 2 1/2 ounces for females. Also called the "summer phalarope," this shorebird has a long, thin bill and a bold blackish stripe on its face and neck. When in breeding plumage, the female is much larger and more brightly colored than the male. On the female, the broad, black stripe streaks from the bill through the eyes down the sides of the neck and blends into cinnamon or chestnut-red coloration extending from her sides onto her breast. Underparts of both sexes are white. In flight, this dark-winged phalarope shows no white stripe in its wings and has a white rump. Its thin black bill is longer than in other phalaropes. In fall and winter, both males and females are gray above and white below, with a white streak above each eye.

The Wilson's phalarope is the most terrestrial of all the phalaropes, feeding as often on land as on water. Wilson's phalaropes prefer inland lakes, marshes and reservoirs for feeding and nesting. Whereas the other phalaropes spend their winters at sea, Wilson's phalaropes typically winter on inland lakes in South America.



Feeding Habits

Wilson's phalaropes often feed while walking on muddy shores, wading in shallow water or swimming in deep water. While feeding on land, phalaropes walk quickly, picking invertebrates from the mud with a quick, repeated spearing motion. While wading, they sometimes probe into the mud with head submerged. When swimming, phalaropes often are seen whirling about in circles on the water, spearing prey at or near the surface. Wilson's phalaropes have been observed spinning at as many as 60 revolutions a minute. In shallow water, this spinning or "pirouetting" is thought to stir up food lodged on the bottom. Phalaropes feed generally on larvae of mosquitos, larvae of crane flies and diving beetles. On the Great Salt Lake, phalaropes feed primarily on the abundant brine shrimp and brine flies. They also will eat seeds of various aquatic plants.

Life Cycle

Wilson's phalaropes are long distance migrants. Each spring they travel 5000 miles from their principal wintering grounds on the high altitude lakes of the central Andes in Argentina to their nesting grounds in the northern Great Plains of the United States and southern Canada. At the Great Salt Lake, phalaropes arrive in late spring for a brief stop on their way to their nesting grounds.

Among phalaropes, the sex roles are reversed when compared to many other avian species. In addition to the females being larger and more brightly colored than the males, females also take the initiative in courtship. On the nesting grounds, a female courting a male follows him wherever he swims. If another female approaches, the first female lowers her head and swims toward the intruder. Actual fights are rare, but if the intruder comes too close, the first female flies toward her, with neck extended and legs dangling. This usually discourages further competition for that male.

Females usually lay three to four eggs after a nest is built in a well-concealed grass-lined hollow near a freshwater marsh, slough, wet meadow, pond or on an island. The prairie pothole country of the northern Great Plains and southern Canada provides the major nesting grounds for Wilson's phalaropes, although some phalaropes nest near freshwater ponds and pools in Utah.

Continuing the reversal of sex roles, the males, rather than the females, incubate the eggs. They also raise the chicks. Soon after laying the eggs, the females begin their southward migration, well ahead of the males and their young. By mid-June, female phalaropes assemble in flocks, ready for the first leg of their journey.

While at the Great Salt Lake, phalaropes feed and molt. They roost on the shoreline, forage near the shore for brine flies, or fly to deeper water to feed on the great quantities of brine shrimp. For many species of shorebirds, molting is a gradual process which usually requires several months. For Wilson's phalaropes, molting replaces the body feathers in only 35 to 40 days. Migration requires that phalaropes store large amounts of fat and molt in a very short period of time. The abundant availability of brine flies and shrimp provides the energy resources they need to accomplish this. Adult phalaropes may actually double their body weight before leaving the Great Salt Lake. When they leave, they make a remarkable non-stop flight to the northern coast of South America.

By mid-July, the males begin to arrive in significant numbers at the Great Salt Lake. The young birds follow to join the flocks in peak abundance in late July. On July 26, 1991, biologists estimated that a total of 600,000 Wilson's phalaropes were concentrated on the Great Salt Lake. The largest concentrations included 274,760 phalaropes at Bear River Bird Refuge, 161,980 at Ogden Bay and 156,460 at the Kaysville/Layton marsh. The majority of phalaropes were found at or near the shoreline in bulrush stubble where there was an abundance of brine flies.

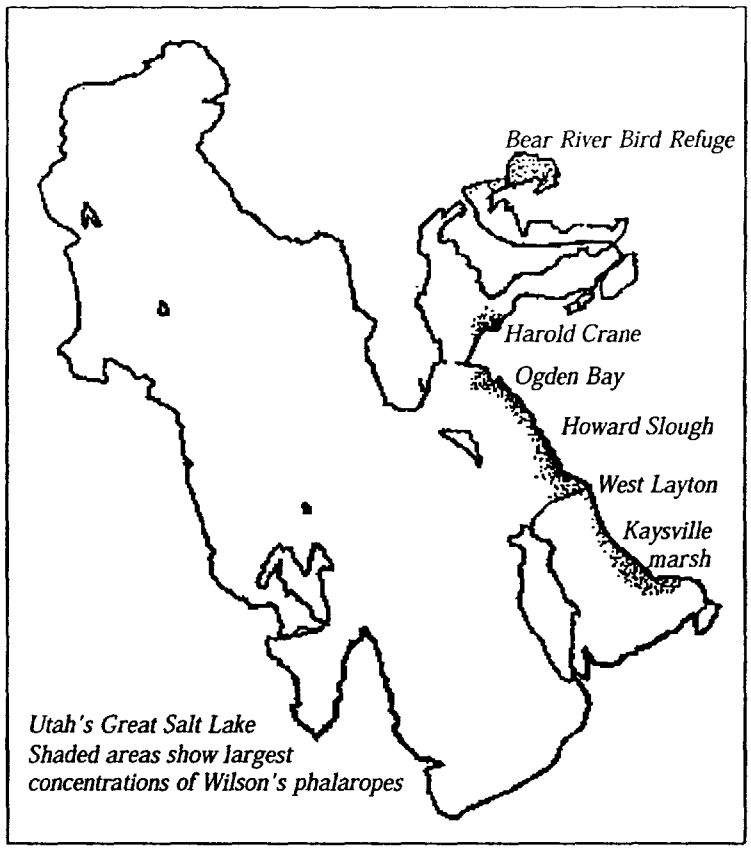
In late summer, females leave the Great Salt Lake first, followed a short time later by the males and juveniles. Most Wilson's phalaropes will have migrated from the Great Salt Lake by the end of August.

Current Status and Management

Wilson's phalaropes and all shorebirds are protected by the federal Migratory Bird Treaty Act and the Utah Wildlife Code. Responsibility for the management of shorebird species in Utah lies with the Wildlife Section within the Utah Division of Wildlife Resources. Several strategies have been implemented to monitor and manage shorebird populations. These include:

- surveys of spring and fall shorebird populations in cooperation with the Great Salt Lake Waterbird Survey Team
- research studies with Hubbs-Sea World Research Institute to determine the importance of the Great Salt Lake to Wilson's phalarope populations
- graduate research studies investigating the ecology of the Great Salt Lake
- a cooperative effort between the Division of Wildlife Resources and Utah State University to determine the status of shorebird populations in Utah
- research of brine shrimp resources and their relationship to shorebird populations by the Great Salt Lake Ecosystem Project
- identification of critical wetland habitats associated with the Great Salt Lake

The current designation of the Great Salt Lake as a Western Hemisphere Shorebird Reserve brings international recognition and support for local conservation efforts and wetland management.



Utah's Great Salt Lake
Shaded areas show largest concentrations of Wilson's phalaropes

What You Can Do

For the best opportunity to view large numbers of Wilson's phalaropes, plan to visit the Great Salt Lake from mid-June through August. Sites along the eastern shore offer the greatest concentrations of phalaropes, especially in late July and early August. Suggested areas, which are easily reached, include Bear River Bird Refuge, Harold Crane Waterfowl Management Area (W.M.A.), Ogden Bay W.M.A., Howard Slough W.M.A., West Layton W.M.A., West Kaysville marsh and the eastern side of the Antelope Island Causeway.

Maps and directions to Ogden Bay W.M.A. and the Harold Crane W.M.A. are found in the Utah Wildlife Viewing Guide, available for $5.95 at Division of Wildlife Resources offices.

For field trip opportunities to visit the Great Salt Lake or to become involved in conservation initiatives affecting Utah's shorebirds, contact local Audubon and nature study groups.

For more information about Wilson's phalaropes and other shorebird populations in Utah, contact the Utah Division of Wildlife Resources Northern Region Office, I & E Manager, 515 East 5300 South, Ogden, UT 84405 (801) 476-2750 or the Utah Division of Wildlife Resources, Avian Coordinator, 1594 West North Temple, Suite 2110, Salt Lake City, UT 84116 (801) 538-4764.

December 29, 2003

Mr. Dennis R. Downs
Executive Secretary
Utah Solid and Hazardous Waste Control Board
Utah Department of Environmental Quality
288 North 1460 West
PO Box 144880
Salt Lake City, Utah 84114 - 4880

Re: *Comments on Proposed Promontory Point Class I Landfill*

Dear Mr. Downs:

On behalf of Great Salt Lake Audubon, and its nearly 1,500 members throughout Utah, I am submitting comments in opposition to the issuance of a permit for the Proposed Promontory Point Class I Landfill, because of the impacts that this project would have on important wildlife habitat and migratory bird populations, which are internationally significant, and the potential for this landfill project to pollute the Great Salt Lake, as well as, discourage recreational uses of the lake. Our comments are derived from information prepared by Mr. Robert Ramsey of Canyon Concepts, LLC, on behalf of Mineral Resources International.

Great Salt Lake Audubon encourages the Board to deny the permit based on the following points:

1) The application fails to show that the site will be accessible in the fashion required by the Conditional Use Permit, i.e., by railroad causeway or the Great Salt Lake causeway.

2) The application does not indicate that the waste modules will be located at least 1000 feet from the most recent high water level and does not sufficiently address whether there is enough water at the site for operation of the facility.

3) The application does not provide for a sufficient groundwater monitoring system.

4) The application does not respond to potential wildlife impacts at nearby wildlife refuges and/or wildlife management areas.

P.O. BOX 520867
SALT LAKE CITY
UTAH 84152
PH: 801.263.1399
www.greatsaltlakeaudubon.org

Access

Our first objection relates to accessibility to the proposed site. According to the permit application, "Access to the proposed landfill facility would be either by way of Union Pacific Railroad causeway, a private dike, or by a county road...." The Box Elder County Conditional Use Permit sets the following condition in Paragraph 7. "Access to the site shall be limited to the railroad causeway or the GSL causeway. No access shall be allowed on existing county roads."

The applicant has not provided evidence that they have an irrevocable agreement to use the privately owned GSL causeway or any detail on how the proposed landfill can be accessed from the causeway without the use of existing county roads. The applicant has not provided any detail on the feasibility or design of a railroad spur off the Union Pacific mainline. Neither have they provided evidence of an agreement with Union Pacific to do so. Such agreements and design details seem to be a critical step prior to issuing a permit for landfill construction and operation.

Siting Criteria

Our second objection stems from the conflict of the application with the "Solid Waste Facility Location Standards" as provided in the Utah Solid and Hazardous Waste Act. According to the Act, no new facility shall be located within:

- one thousand feet of a . . . recreation area;
- ecologically and scientifically significant natural areas including wildlife management areas and habitat for threatened or endangered species . . . .
- in a location that could cause contamination to a lake, reservoir, or pond.

R315-302-1(2)

More specifically, the Act states:

> ... the unit will not cause or contribute to significant degradation of wetlands. The owner or operator must demonstrate the integrity of the unit and its ability to protect ecological resources by addressing the following factors: (D) impacts on fish, wildlife, and other aquatic resources and their habitat from release of the solid waste
>
> R315-302-1(2)(d)(iv)

We believe that while the applicant has provided for some buffering of the landfill from the lake, it is not sufficient to avoid impacts to water quality, to brine shrimp and brine fly populations – food source for many migratory birds – to migratory birds, and to recreational uses of the lake. We recommend siting of the proposed landfill at least one mile from the ordinary high water mark of the lake, 4212' above mean sea level, if not

farther away, to avoid the impacts of fugitive waste. We believe that fugitive waste will not only impact nearby wildlife habitat, and attract predators, but will also lessen the recreational uses of the lake because of people's aversion to use visibly polluted water. Due to known natural fluctuations of the lake level, we strongly urge the Board to deny the permit for this location.

Water Quality Monitoring

Our third objection concerns the lack of adequate groundwater monitoring and testing. The application does not mention or describe a groundwater monitoring system. No discussion has been provided as to the rationale for placement or whether additional wells are contemplated. The applicant has installed four monitoring wells in the general topographic downgradient direction. It is not clear that these wells, as located, would detect contaminant migration from more than four of the nine front line modules. Because the projected life expectancy of individual modules ranges from 2-4 years, and because the proposed downgradient boundary is nearly 5000 feet long, monitoring wells should be constructed immediately downgradient from each of the front line modules. That is, one monitoring well for each downgradient module.

The application provides no information on monitoring well installation techniques (drilling, construction, decontamination) used to construct the monitoring wells. This is necessary to assure that the wells will provide valid samples of groundwater quality and is required by R315-310-4.

Wildlife Impacts

We raise our fourth objection, because of the ecological significance of the Great Salt Lake, the proximity of the Proposed Landfill to the shores of the Great Salt Lake, the fact that the proposed landfill will actually be located within a WHSRN region, impacts to wildlife (including a pelican rookery), and the virtual certainty that the proposed landfill will cause contamination of the Great Salt Lake, all strongly support the denial of the Class I Permit, viz., the proposed landfill simply cannot satisfy the siting criteria.

Great Salt Lake Audubon supports comments submitted by the USFWS concerning the proposed landfill:

1) "The Service believes that a site specific wildlife analysis should be conducted."

2) "The Service recommends a plan that would maximize the wildlife value of the buffer strip surrounding the landfill... Not only could this buffer area provide valuable habitat during the life of the project, it could be an important seed/colonization source for plants and wildlife after the landfill has been reclaimed."

3) "The service is concerned with the potential impacts the landfill may have on the nearby gull and pelican colonies. Specifically, we are concerned that the landfill could act as an attractant for gulls and this may result in an increase in pelican predation at the nearby rookery. We recommend a literature review to see what similar impacts may have occurred at other landfills and what measures were taken in those instances to mitigate impacts."

4) "We suggest that the proponent explore the use of non-lethal barriers for excluding gulls and other birds and wildlife from exposed evaporation ponds."

5) "The Service strongly recommends that waste be bailed or otherwise contained prior to transport to the proposed facility and that a monitoring protocol be developed to assess the amount of waste escaping the landfill and subsequently landing in the Great Salt Lake. There are a multitude of common trash items that are known to be deadly to birds and other wildlife. Any means by which to reduce exposure of these items to wildlife would improve the project."

In our opinion, the applicant has not provided enough information regarding how these concerns will be addressed, and has not provided sufficient description of any wildlife or environmental mitigation. We also dispute claims made by the applicant that state the location of the proposed landfill is not located in an ecologically important area.

GSLA is opposed to the excavation of soils for daily operations from the proposed buffer zone and nearby Little Valley. Removing soil from the buffer area will destroy wildlife habitat, a key concern raised by the USFWS. Insufficient detail is provided on the method of daily or intermediate cover placement. The proper placement of daily and intermediate cover is critical to control of disease vectors, gull populations and wind-blown refuse.

In summary, we recommend that the application for a Class I Landfill Permit be denied at this time.

Respectfully,

Jeff Salt
Executive Director and Great Salt Lakekeeper

FRIENDS of Great Salt Lake
PO Box 2655
Salt Lake City, Utah 84110-2655
FAX

To: Carl Wadsworth, DSHW 538-6715
From: Lynn de Freitas, FOGSL
Re: Public Comments on Promontory Pt. Class I Landfill

Hello Carl,
Please accept this faxed copy of our comments on the proposed Class I Promontory Pt. Landfill. Earlier today, I sent an email of these same comments and will also post these tomorrow to ensure you have fully ledgible copies of our comments.

Please let me know how things will proceed.

Best.

lyn

4 pages including cover

FRIENDS *of Great Salt Lake*
P.O. Box 2655 • Salt Lake City, UT 84110-2655 • (801) 583-5593 • Fax (801) 581-9003
www.fogsl.org

December 30, 2003

Carl Wadsworth
Utah Division of Solid and Hazardous Waste
PO Box 144880
Salt Lake City, Utah 84114-4880

Subject: Solid Waste Comments on Promontory Pt. Class I Landfill

FRIENDS of Great Salt Lake is a nonprofit organization whose mission is to preserve and protect the Great Salt Lake Ecosystem through education, research and advocacy.

We want to thank the Division of Solid and Hazardous Waste (Division) for this opportunity to comment on the Promontory LLC (Applicant) proposal to create a Class I Municipal Landfill on Promontory Point.

We have reviewed the August 2003 permit proposal that the Applicant has on file with the Division and have spoken with many resources throughout the community about this issue.

Although we realize that it is not the responsibility of the Division to base permitting decisions on land use planning issues, or the economic considerations of such proposed projects, we have determined that a municipal landfill on Promontory Point would not be in the best interest of an internationally recognized ecosystem that we, who live along its shores, share as a precious ecological and economic resource.

And whether or not this kind of land use for Promontory Point is consistent with Box Elder County's general plan, we have found in our research that although there may be some small margin of economic livelihood that the county might anticipate, the negatives that surround this kind of impact on private property values, future economic development and on Great Salt Lake would far exceed any of those benefits.

We have also found that competition among existing landfill facilities around the region is high and that many of them are vying for the very same clients.

In light of ECDC's commercial landfill in East Carbon and the soon to be on line facility in Green River, the likelihood that Promontory LLC can capture clients to make this business venture viable is dubious at best.

Among our concerns is the proximity of this landfill on such an imposing landscape that touches every watery arm of Great Salt Lake. This proximity holds tremendous potential for contamination of the lake's waters, its wildlife and its economic resources.

After reviewing the Applicant's proposal, we still have concerns about the frequency and protocol of ground water monitoring to ensure against the contamination of groundwater from the operation of the facility. We also need information that addresses how this data will be made available to the public. We need to know in advance what recourse both the county and state have in the event contamination occurs.

One of the major tourist attractions in northern Utah is Great Salt Lake. All of the counties adjoining Great Salt Lake derive economic value from its resources including its viewshed, its minerals, its brine shrimp, its recreation, its wildlife and birds and its great cultural history.

Great Salt Lake is a huge landmark and tourist attraction for Box Elder County. Along with the Golden Spike National Historic Site, Spiral Jetty, and the Rocket Park, Box Elder County has the distinction of being the home of one of the nation's oldest wildlife refuges, the Bear River Migratory Bird Refuge.

We know that landfills attract gulls because of the constant food supply they provide. What impacts will these increased populations of gulls have on nesting species at the Bear River Refuge, at Farmington Bay, at the Nature Conservancy's Shorelands Preserve and on Gunnison Island, where breeding populations of American White Pelicans have their sanctuary?

In Appendix F Cultural and Environmental, the Utah Field Office of the US Fish and Wildlife Service (Service) indicates that there are potential concerns with gull predation, particularly on nesting American White Pelicans. The Service recommends a thorough literature review on other landfill facilities, the relationship of increased gull predation and mitigation for those impacts.

Given the fact that Great Salt Lake is the site of one of 4 of the largest breeding colonies of American White Pelicans in North America, the Division should require the Applicant to include the results of such a review and offer a plan to ameliorate such impacts if they occur.

The same report recommends that a site specific wildlife analysis should be conducted because the wildlife analysis included in the Applicant's proposal is too

State of Utah

MICHAEL O. LEAVITT
Governor

OLENE S. WALKER
Lieutenant Governor

Governor's Office of Planning and Budget
WES CURTIS
State Planning Coordinator

Resource Development Coordinating Committee
JOHN A. HARJA
Executive Director

GLADE SOWARDS
Committee Chariman

December 23, 2003

Dennis R. Downs, Executive Secretary
Utah Solid and Hazardous Waste Control Board
Utah Department of Environmental Quality
288 North 1460 West
PO Box 144880
Salt Lake City, Utah 84114-4880

SUBJECT: Promontory Point Landfill Draft Solid Waste Permit
Project No. 03-3521

Dear Mr. Downs:

The Resource Development Coordinating Committee (RDCC), representing the State of Utah, has reviewed this proposal. The Division of Wildlife Resources comments:

> The UDWR provided a comment letter on this project on July 25, 2003, but our letter was not attached in the appendices along with the other comment letters on this project. In our letter, we identified several wildlife concerns that were not addressed in the Draft Solid Waste Permit for the Promontory Point Class I Landfill. We would like to restate our concerns at this time. Please refer to our previous letter for more detailed information on these issues.
>
> - The draft permit does not identify groundwater movement flows or indicate whether the four proposed monitoring wells located approximately several hundred yards away from the Great Salt Lake (GSL) will be sufficient to protect water quality in the GSL. According to sample wells, groundwater is located approximately 30' below the surface in this location. Groundwater from the Promontory Point area appears to discharge into the GSL, yet no identification of underwater seeps/springs/artesian wells has been identified nor have any contingency plans been identified in the event that contamination/pollutants are found within the GSL environment. No monitoring or sampling of GSL seeps/springs/artesian wells or sediments has been identified.

- The UDWR appreciates the additional management practices that will be undertaken to reduce fugitive waste. However, we would like to further reduce the possibility of fugitive waste leaving the site and contaminating the GSL or surrounding wildlife habitats. Because of frequent high wind conditions in this area, loose trash that is dumped into the landfill may be blown off site. We again request that all incoming trash arrive baled to further minimize fugitive trash blowing off the site.

- During our site visit in June 2003, the project proponents identified the location for a series of evaporation ponds that will be located adjacent to the shore of the GSL. These ponds would hold leachate and storm water run-off from the landfill site. We did not see any information pertaining to the location of any evaporation ponds in either the draft permit or the permit application. If ponds will be located on-site, the permit should specify how the ponds will be protected from wildlife use and potential contamination. If these ponds are to be located within the historical floodplain of the GSL, the permit should identify the precautions that will be required to contain leachate and storm water run-off during high lake elevations.

In addition to the above comments included in our earlier letter, we provide the following additional comments for your consideration.

- Two potential borrow areas have now been identified. One is the existing Little Valley Borrow Site. We do not have significant concerns associated with use of this area. The second potential borrow area (Figure 4.1) is identified as the upland buffer surrounding the landfill site. Project proponents had identified this as a buffer surrounding the landfill and had proposed wildlife habitat enhancements for this area. The UDWR's previous letter and the letter from the U.S. Fish and Wildlife Service both indicate support for efforts to enhance this area for wildlife, as enhancing this area will somewhat mitigate wildlife impacts associated with the landfill. We recommend that the upland buffer not be used for fill.

Please contact Pam Kramer of our Ogden office (801-476-2775) if we can be of further assistance.

The Committee appreciates the opportunity to review this proposal. Please direct any other written questions regarding this correspondence to the Resource Development Coordinating Committee at the above address or call Carolyn Wright at (801) 538-5535 or myself at (801) 538-5559.

Sincerely,

John Harja

HOUSE OF REPRESENTATIVES
STATE OF UTAH

REPRESENTATIVE ELI H. ANDERSON
1ST DISTRICT
(BOX ELDER, CACHE AND TOOELE COUNTIES)
8790 WEST HIGHWAY 102
TREMONTON, UTAH 84337
RES. (435) 854-3760
E-Mail: eanderso@le.state.ut.us

STANDING COMMITTEES: NATURAL RESOURCES, AGRICULTURE AND ENVIRONMENT; REVENUE AND TAXATION
APPROPRIATIONS: COMMERCE AND REVENUE

December 08, 2003

Mr. Dennis R. Downs, Director
State of Utah Department of Environmental Quality
Division of Solid and Hazardous Waste
288 North 1460 West
Salt Lake City, Utah 84114-4880

Subject: Letter of support for the proposed Promontory Landfill

Dear Mr. Downs:

Sorry I am unable to be with you in person today. I am recovering from recent surgery and unable to attend this meeting.

I wanted you to know that I have personally visited the proposed Promontory Landfill site. I was very impressed with the remote nature of the site yet it's close proximity to the cities and towns in Northern Utah. It was explained to me that the long range planning needs for the Wasatch Front needs an alternative site for the disposal of municipal waste. Promontory seems like a natural location for such a project. Several years ago when I chaired The Legislative Municipal Landfill Siting Task Force we looked all over Box Elder County for acceptable locations for such a project. This location was at the top of our list. It makes good sense for this project to move forward. I would appreciate your support in granting a Class I permit for this purpose.

Should you have any questions or concerns, or if I can be of any assistance please call me at (435) 854-3760.

Sincerely,

Eli H. Anderson

TREMONTON CITY CORPORATION

102 South Tremont Street
P.O. Box 100
Tremonton, Utah 84337
(435) 257-2625
FAX (435) 257-1915
www.tremontoncity.com

December 8, 2003

Mr. Dennis R. Downs, Director
State of Utah Department of Environmental Quality
Division of Solid and Hazardous Waste
288 North 1460 West
Salt Lake City, Utah 84114-4880

Dear Mr. Downs:

This letter is to inform you that Tremonton City is neither for nor against the Promontory Landfill Class I application. This location is much better suited for this application than a Whites Valley location.

Your help in this matter is appreciated.

Sincerely,

Max Weese
Tremonton City Mayor

December 10, 2003

Mr. Dennis R. Downs, Director
State of Utah Department of Environmental Quality
Division of Solid and Hazardous Waste
288 North 1460 West
Salt Lake City, Utah 84114-4880

Subject: Letter of support for the proposal Landfill

Dear Mr. Downs:

I am so sorry I will not be able to be with you at your meeting. I am recovering from a very serious staph infection.

I have however visited the proposed land fill site in Promontory while serving on the board selected to find a site adequate for the Wasatch Front and northern Utah garbage and solid waste. The Land fill site being considered at this time was our top priority. The freight cost to remove the garbage at this site would be a lot less compared to other areas. I surely feel that you should give serious consideration to this site

I feel it would be a step in the right direction to move forward with this project.

If I can be of any assistance please call me at (435) 854 3920

Sincerely,

Deloris Stokes

Deloris Stokes